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## **REMARKS**

A new set of method claims 23-31 has been added to define novel and patentable subject matter over the cited references.

### **Claim 23**

New claim 23 defines a method of making a container with an opening and a cap closing the opening which comprises providing a pair of mold halves a first mold cavity for forming and defining the shape of a container and a second cavity spaced from the first cavity for forming between the mold halves at least one flash section and forming at least one cap in the flash section, providing a parison of a polymeric material between the open mold halves, closing the mold halves together to form from a portion the parison at least one flash section in the region of the second cavity and at least one cap in the flash section, providing a pressurizing fluid into the parison within the closed mold as to expand the parison within the first mold cavity to form and define the shape of the container, forming an opening through the container, separating the cap from the flash section, and disposing the cap over the opening and permanently attaching and sealing the cap to the container to close the opening.

The specific method has the significant practical advantages of simultaneously forming both the cap and the container of the same polymer material at the same time with the same mold thereby eliminating independent molding of the cap in a secondary operation, reducing scrap or waste material, providing a cap having the same characteristics as the container, providing economical manufacture and assembly of a container with an opening

and a cap permanently attached and sealed to the container to close the opening.

### **The Rejection**

Original method claims 1 and 10 were rejected over Chlystun alone or in combination with Arnold and/or Kohn.

### **Chlystun U.S. 4,082,827**

Chlystun discloses a process for blow molding a container 10 with a spout 20 having a plurality of pleats 22 so that the spout is collapsible into the container and an integral cover 31 blow molded simultaneously as part of and with the spout and container. A pull tab 34 with an opening 35 is compression molded as an integral part of the spout for the purpose of pulling the collapsed spout out of the container. While the main body of the container 10 and its side wall 12 are blow molded of a plastic material, it has an open bottom through which the container is filled and thereafter a metal lid 16 of sheet metal is attached to the sidewall 12 of the container after filling is completed (Col 3, Line 64 - Col 4, Line 6). This permits the container to be used with conventional filling equipment in a conventional processing line. When the end user wants to pour or remove the contents from the container, he pulls the tab 34 to extend the spout and cuts the cover 31 off the end of the spout to pour the contents from the container.

Contrary to the contention in the Office Action, the cover 31 or cap is not welded to the container and is not separated from the container body for welding to the container. To the contrary, it is blow molded as part of the spout, the container is filled from

the bottom, and the cap is torn or severed from the spout only by the end user for the purpose of discharging the contents of the container.

**Arnold U.S. Patent 6,290,094**

Arnold discloses a container 10 for shampoo and the like which is blow molded with a large fill port 16, a small dispensing port 18 and an integral hinged flap 14 with live hinges 34 and 50 with a first closure portion 40 with fingers 42 and a bead 54 releasably closing the fill port 16 and a second closure portion 42 with a plug 48 releasably closing the dispensing port 18. In use, the container is initially filled (and may be refilled) through the port 16 which is releasably closed by the portion 40 with snap fingers 46, and by squeezing the container its contents is dispensed through the port 18 which is releasably opened and closed by the portion 42 and its plug 48.

**Kohn U.S. Patent 6,068,900**

Kohn was cited as simply disclosing a container having two layers 2 and 3 of different polymers providing high resistance to chemical attack. The container has a removable twist-off cap 6 or a re-releasable closure 7 which is formed separately from the container, thereafter a layer 8 of sealing material is inserted in the cap, the container is filled and the cap is releasably twisted or snapped onto the container.

**Claim 23 is Novel and Patentable**

Neither applicant's specific concept, specific construction and arrangement, nor its significant practical advantages are disclosed, suggested or made obvious to skilled persons by these three references whether considered alone or in combination.

None of these references, whether considered alone or in combination, discloses or suggests applicant's specific concept and method steps of providing mold halves having both a first cavity for blow molding an entire container and adjacent thereto a second cavity for forming a cap in flash from blow molding the container, providing a parison between the open mold halves, closing the mold halves to form flash from the parison in the region of the second cavity and the cap in the flash, providing pressurized fluid in the parison to form and define the shape of the entire container in the first mold cavity, forming an opening in the container, separating the cap from the flash section, disposing the cap over the opening and permanently attaching and sealing the cap to the container to close the opening.

None of these references, whether considered alone or in combination, disclose or suggest this specific concept and method of steps for simultaneously forming a cap and a blow molded container from the same parison and permanently covering and sealing an opening in the container nor the significant practical advantages outlined above of this method.

Indeed, the proposed combination of references, teach away from applicant's specific method and concept. Chlystun does not disclose any cover or cap which is formed separately from the blow molded container, forming any cap in the flash of the container, separating any cap from the flash, forming any hole through the container to be covered by

the cap, or disposing the separated cap over the opening and permanently fixing and sealing the cap to the container. Arnold and Kohn also teach away from applicant's invention by disclosing removable cap or covers releasably attached to the container for removal when discharging the contents from the container.

Furthermore, none of the references contain any suggestion, disclosure or motivation as to which of their numerous elements should be discarded and which selected, re-arranged and recombined with elements not disclosed in this art to achieve applicant's specific concept and method steps and its significant practical advantages, all of which are part of the subject matter as a whole to be considered in determining patentability under §103.

Accordingly, for at least these reasons, new claim 23 defines novel and patentable subject matter under §102 and 103 over the cited references whether considered alone or in combination and is believed to be allowable.

### **Claims 24-31**

Each of claims 24-31 is ultimately dependent on new claim 23 and hence defines novel and patentable subject matter for at least the foregoing reasons.

None of these references, whether considered alone or in combination, disclose, suggest or teach a container and a separate cap simultaneously produced from the same multi-layer parison which permits them to be readily secured and sealed together by welding. Accordingly, each of claims 25, 26 and 28-31 also define patentable subject matter for at least these additional reasons.

**Conclusion**

The new set of method claims 23-31 is believed to define novel and patentable subject matter under §102 and 103 for at least the foregoing reasons and to be in a proper form for allowance which action is respectfully requested.

If, after considering these new claims, the Examiner is of the view that any of them are not allowable, a telephone interview with applicant's undersigned attorney William Francis is requested so that immediate consideration can be given to any further amendments suggested by the Examiner or otherwise needed to place all of these claims in a condition for allowance. The Examiner is asked to initiate this telephone interview by calling William Francis at (248) 689-3500 Monday through Friday between 9:00 A.M. and 5:00 P.M.

We believe no additional claim fees are due; however, if the Patent Office determines otherwise, it is hereby respectfully requested and hereby authorized that any additional fees be charged to our Deposit Account No. 50-0852.

A Marked-Up Copy Showing Amendments Made in the Response to the First Office Action is enclosed.

Respectfully submitted,

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GP/3727



470AM

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: **Mark R. Johansen**

Serial No. 09/606,702

Filed: June 29, 2000

For: Multiple Layer Polymeric Cap and Method of Making the Same

Group Art Unit: 3727

Examiner: N. Eloshway

In reply to: Examiner's Letter of October 24, 001

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**CERTIFICATE OF MAILING**

Date of Deposit with U.S. Postal Service **JANUARY 22, 2002**. I hereby certify that this paper is being deposited with the United States Postal Service as first class mail under 37 CFR 1.8 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

  
Shirley A. Langley

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Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

**MARKED-UP COPY SHOWING AMENDMENTS MADE  
IN RESPONSE TO THE FIRST OFFICE ACTION**

This is in response to the first Office Action of October 24, 2001 which rejected all of the elected method claims 1-3 and 10-13 over the prior art.

**Please amend this application as follows:**

**IN THE CLAIMS**

**Please CANCEL without prejudice, claims 1-3 and 10-13.**

**Please ADD the following new claims 23-31:**

**23. (Added)**

1           A method of forming a container with an opening and a cap sealing the  
2           opening, comprising the steps of:

3               providing a pair of mold halves defining a first mold cavity to form and define  
4               the shape of a container and adjacent the first cavity a second cavity to form at least one cap  
5               in a flash section;

6               providing a parison of a polymeric material;

7               closing the mold halves together to receive a portion of the parison between  
8               them forming at least one flash section in the region of the second cavity and at least one cap  
9               in the flash section;

10               providing a pressurizing fluid into the parison within the closed mold halves  
11               to expand the parison within the first mold cavity to form the entire container and define the  
12               shape of the container;

13               forming an opening through the container at a location spaced from the cap;

14               separating the cap from the flash section; and

15               disposing the cap over the opening and permanently attaching and sealing the  
16               cap to the container to close the opening.

**24. (Added)**

1           The method of claim 23 wherein the parison, container and cap have a vapor  
2           barrier layer of a polymeric material disposed between inner and outer layers of a different  
3           polymeric material.

**24. (Added)**

1           The method of claim 23 wherein the parison, container and cap have a vapor  
2           barrier layer of a polymeric material disposed between inner and outer layers of a different  
3           polymeric material.

**25. (Added)**

1           The method of claim 23 wherein the parison, container and cap have multiple  
2           layers of polymeric material including at least one structural layer and at least one vapor  
3           barrier layer.

**26. (Added)**

1           The method of claim 23 which also comprises welding at least one of the  
2           inner layer and the outer layer of the cap to the outer layer of the container to permanently  
3           attach and seal the cap to the container.

**27. (Added)**

1           The method of claim 23 which also comprises the step of welding the cap to  
2           the container to permanently attach and seal the cap to the container.

**28. (Added)**

1        The method of claim 23 which further comprises providing the parison with  
2        an outer layer of a polymer material, an inner layer of a polymer material and a vapor barrier  
3        layer of a polymer material received between the inner and outer layers with the layers being  
4        simultaneously extruded into the parison which is received in a generally molten state  
5        between the open mold halves in a blow molding machine.

**29. (Added)**

1        The method of claim 28 wherein the cap has twice as many vapor barrier  
2        layers as the vapor barrier layer(s) of the container.

**30. (Added)**

1        The method of claim 28 wherein the inner layer and the outer layer of the  
2        parison, container and cap are of a high density polyethylene polymer material.

**31. (Added)**

1        The method of claim 30 wherein layers of high density polyethylene polymer  
2        material of the container and the cap are heat welded together to permanently attach and seal  
3        the cap to the container.